Washington University in St.Louis

Certificate in Clinical Effectiveness

Students who complete the Certificate in Clinical Effectiveness will develop the strong methodological skills needed for clinical outcomes research. Students will achieve competency in designing clinical and observational studies, conducting secondary analysis of existing data, and evaluating clinical epidemiology or clinical research projects of clinical or public health significance.

Requirements

The certificate will require a minimum of 15 total credits, including two core courses and three additional elective courses. All electives will be reviewed and approved prior to registration to ensure relevance to the certificate. The certificate can be completed in one year. Exceptions can be made, and all course work must be successfully completed within five years from the start of the first course.

Core Courses

Code	Title	Units
PHS 501	Introduction to Epidemiology (Fall 1)	3
PHS 511	Introductory Biostatistics for Clinical Research (Fall 1)	3

Elective Courses

Code	Title	Units
PHS 502	Intermediate Epidemiology (Fall 2)	3
PHS 5254	Using Administrative Data for Health Services Research (Spring 1 & 2)	3
PHS 527	Development, Validation and Application of Risk Prediction Models (Spring 1 & 2)	3
PHS 540	Decision Analysis for Clinical Investigation and Economic Evaluation (Fall 1 & 2)	3
PHS 550	Randomized Controlled Trials (Fall 1 & 2)	3
PHS 551	Systematic Reviews and Meta-Analysis (Spring 1 & 2)	3
PHS 580	Introduction to Health Disparities and the Structural and Social Determinants of Health (Fall 1 & 2)	2
PHS 590	Introduction to Propensity Score Methods (Spring 1 & 2)	1
PHS 610	Multilevel and Longitudinal Data Analyses for Clinical Research (Spring 1 & 2)	3

Course Credit

All core courses must be taken for a letter grade. Elective courses may be taken pass/fail.

Who Can Apply

- Medical school students and those in medical residency training
- Students in a master's or doctoral degree program at Washington University
- Career-development awardees
- No international applicants
- No remote learning